# The New York State Department of Health Cytopathology Proficiency Testing Program Lessons Learned and Recommendations

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# Background

- 1964: The New York State Proficiency Testing Program mandated by the NYS Lab Services Act
- 1966: Medicare mandates that laboratories engaging in interstate commerce participate in approved PT programs for laboratory specialties, including cytology
- 1967: Wisconsin starts the first cytology PT program in the US (mailed glass slides)
- 1968: New York Cytology PT program established as an on-site evaluation using glass slides

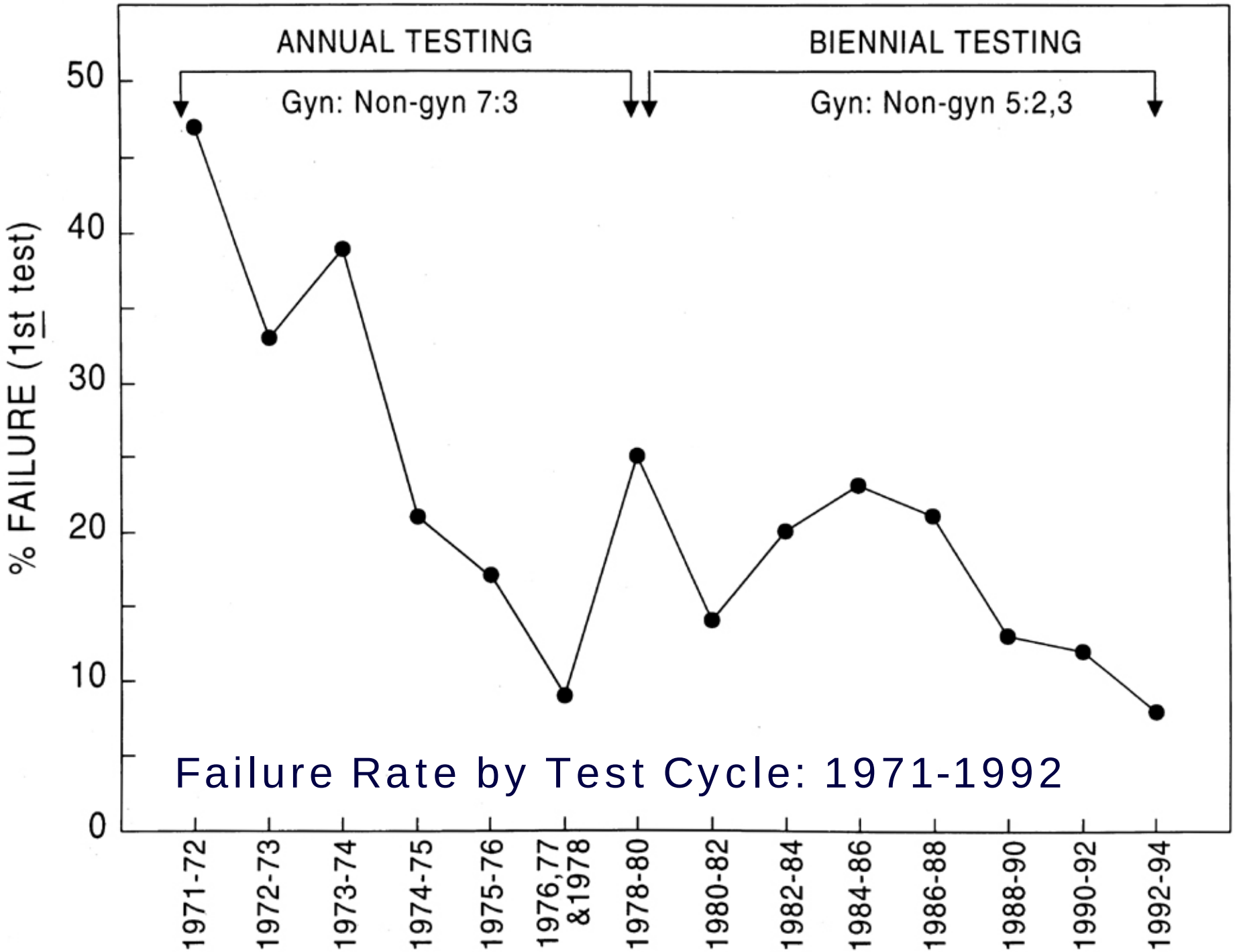
# History of the NYS Program

- 1969-1971: Annual tests administered to CTs (five slides, three cervical/vaginal/ two sputum)
- 1971-1978: Test expanded to include CTs and pathologists; laboratory graded, ten slide format (seven cervical/vaginal, two sputum)
- 1978: Test changed to a biennial format
- 1980: Body fluid slides added (five cervical/vaginal, three sputum, two body fluid)
- 1988: Test instructions modified to include up-to-date terminology, including SIL and HPV
- 2004: Liquid-based format added

# Frequency

## New York State switches to a biennial testing format in 1978

- Logistical and workload problems
- Skills of cytotechnolgists and cytopathologists are durable
- Review of performance data shows that failure rates leveled off
- No appreciable difference in failure rates with biennial testing




Failure Rate by Test Cycle: 1971-1992

# Test Design-CMS vs. NYS

**CMS**

- Ten slides,gyn only
- Annual
- Individual grade, but each laboratory must enroll
- Participation at one site of employment
- Each pathologist must participate

**NYS**

- Ten slides,gyn/non-gyn
- Biennial
- Laboratory grade,but individual performance is tracked
- Participation at all sites of employment
- Designated pathologists participate

# Grading - CMS vs. NYS

| | CMS | NYS |
|---|---|---|
| Passing Score | 90% for each individual | 90% for the laboratory, 80% for CT's |
| Diagnostic Categories | Four (unsatisfactory, Negative, LSIL, HSIL/cancer) | Two for CTs (negative or RTP) three for pathologists (negative, SIL, positive) |
| Scoring Scheme | Error types weighted differently; higher point deductions for pathologists | Equal weighting for errors; equivalent point deductions for CTs and pathologists |

# Test Performance-Statistics

| First Test | New York State 2002-2004 Individual Test Event Data * Total | Pass | Fail | NYS PT Fail Rate | MIME/Maryland 2005 Test Data NYS Fail Rate | Nat'l Fail Rate |
|---|---|---|---|---|---|---|
| Cytotech (80%) | 1,053 | 1,040 | 13 | 1% | ------ | ----- |
| Cytotech (90%)** | 1,053 | 988 | 65 | 6% | 5% | 7% |
| Pathologist (Unscreened Slides) | 70 | 58 | 12 | 17% | 32% | 33% |
| Pathologist (Screened Slides) | 1,044 | 1,034 | 10 | 10% | 11% | 10% |

* Each event represents one 10-slide test set, includes out-of-state l

** NYS test performance graded against CMS grading criteria of 90%

# Test Performance-Observations

- Failure rates nearly identical for cytotechnologists and pathologists reviewing pre-screened slides, for the NYS and CMS-approved tests (MIME and Maryland) using the federal passing score of 90%
- Failure rates for pathologists reviewing unscreened slides are 50% lower on NYS test (because in NYS laboratory can designate pathologists to participate? )
- Both models provide comparable results.

# Considerations

- Track individual grades to ensure that all personnel reviewing slides are evaluated
- Decrease frequency of testing to a level that ensures an adequate level of oversight while minimizing costs and disruption to regulated parties
- Change the design of test sets to reduce the level of predictability (increase number of slides in a test set or revisit the requirement for mandatory inclusion of all diagnostic categories)

# Considerations-continued

- Develop a simple and equitable scoring scheme to evaluate the locator skills of cytotechnologists and the diagnostic skills of pathologists (consider symmetrical scoring grids and and equivalent passing scores for pathologists and cytotechnologists)
- Revise the diagnostic categories to more accurately reflect clinical practice (LSIL vs. HSIL)
- Require focused remediation in the area of error